

**System and Method for
CPI Load Balancing in SMT Processors**

ABSTRACT

A system and method for scheduling threads in a
5 Simultaneous Multithreading (SMT) processor environment
utilizing multiple SMT processors is provided. Poor
performing threads that are being run on each of the SMT
processors are identified. After being identified, the
poor performing threads are moved to a different SMT
10 processor. Data is captured regarding the performance of
threads. In one embodiment, this data includes each
threads' CPI value. When a thread is moved, data regarding
the thread and its performance at the time it was moved is
recorded along with a timestamp. The data regarding
15 previous moves is used to determine whether a thread's
performance is improved following the move.